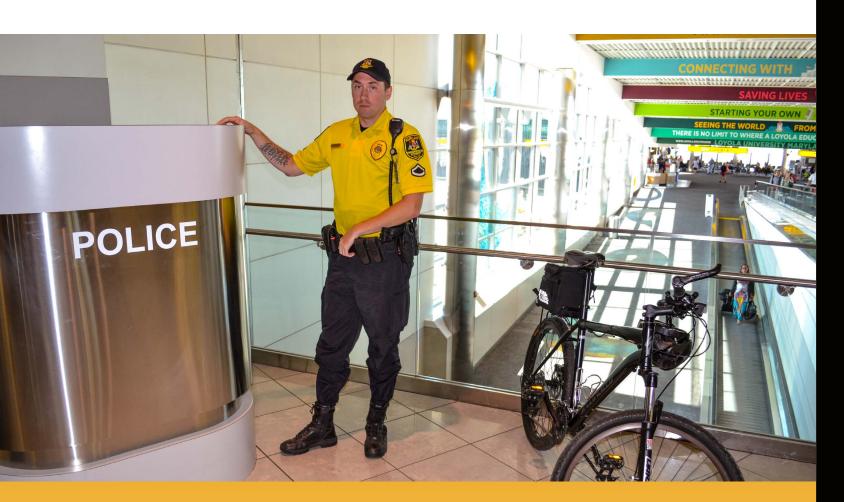
# TANGIBLE RESULT #3

# Provide a Safe and Secure Transportation Infrastructure



MDOT will not compromise on our commitment to continually improve the safety and security of our customers and partners in everything we do.

## **RESULT DRIVER:**

Sarah Clifford Maryland Transportation Authority (MDTA)

#### TANGIBLE RESULT DRIVER:

Sarah Clifford **Maryland Transportation Authority** 

### PERFORMANCE MEASURE DRIVER:

**Bud Frank** 

The Secretary's Office (TSO)

#### **PURPOSE OF MEASURE:**

To track crime trends and adjust strategies/staffing/ response to protect customers, employees, and State property.

## FREQUENCY:

Quarterly

### DATA COLLECTION METHODOLOGY:

MTA Police and MDTA Police will report directly to Measure Driver. SHA and MVA will compile information and also report directly to Measure Driver. Measure Driver will report to Project Management Team.

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 3.1

# Number of Crimes Against Persons and Property Committed at MDOT Facilities

This measure includes all Part I offenses and select Part II offenses as defined in the FBI Uniform Crime Report (UCR). The UCR is a national standard used by law enforcement for the collection and comparison of crime data nationwide. Part I offenses include homicide, forcible rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft and arson. Part II offenses include less serious offenses including other assaults, vandalism, disorderly conduct, and other sex offenses.

The following charts show annual numbers for Calendar Year 2016 for Part I and Part II crimes. The charts are listed in three categories: MTA, MAA, and the remaining Transportation Business Units combined. The data has remained flat or showed a slight decline over the calendar year.

Law enforcement reviews this data on a weekly and bi-weekly basis for resource allocation and targeted enforcement activities. The data is also used to determine areas of security concern.



# Provide a Safe and Secure Transportation Infrastructure

### PERFORMANCE MEASURE 3.1

Number of Crimes Against Persons and Property Committed at MDOT Facilities

Chart 3.1.1: PART I Crimes - Calendar Year 2016

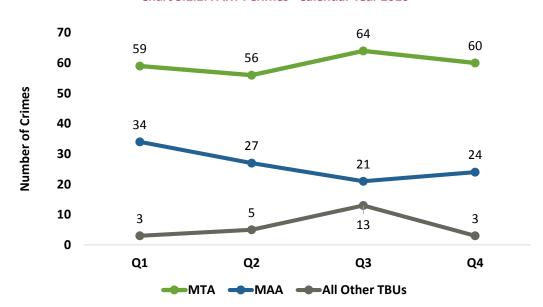
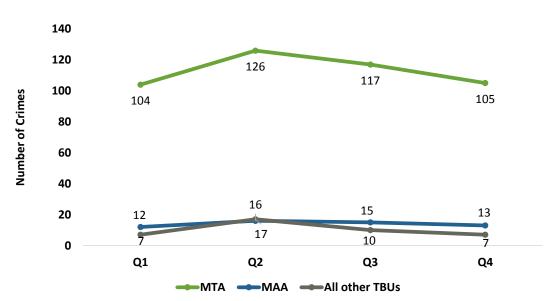


Chart 3.1.2: PART II Crimes - Calendar Year 2016



### TANGIBLE RESULT DRIVER:

Sarah Clifford **Maryland Transportation Authority** 

### PERFORMANCE MEASURE DRIVER:

Thomas Gianni Motor Vehicle Administration (MVA)

#### **PURPOSE OF MEASURE:**

To track quarterly and annual trends in the number of persons killed in motor vehicle crashes.

## FREQUENCY:

Quarterly

## DATA COLLECTION METHODOLOGY

Based on Collected Police Data submitted to Maryland State Police (MSP) through **Automated Crash Reporting** System (ACRS).

### NATIONAL BENCHMARK: N/A

### PERFORMANCE MEASURE 3.2

## Number of Traffic-Related Fatalities on All Roads

MDOT strives to implement programs that will increase driver safety by reducing traffic-related crashes that result in serious injuries and deaths. One key measure is tracking the number of fatalities on all roads and analyzing specific causes and related trends. Maryland's Strategic Highway Safety Plan (SHSP) is a comprehensive set of emphasis areas and strategies designed to reduce highway fatalities and serious injuries through the implementation of behavioral and engineering safety countermeasures. It is based on the Toward Zero Deaths approach to reduce fatalities 50% by 2030 from the 2008 baseline of 592 fatalities. Interim reduction targets include 430 in 2015 and 387 in 2020.

Following a decade-long period of significant decreases in traffic-related fatalities, this trend unfortunately has begun to reverse. In 2014, the number of fatalities (443) was the lowest since 1948; but in 2015, the State experienced a 17.6% increase in highway fatalities (521), the largest single-year increase in 30 years. Although preliminary data for 2016 indicate a relative leveling off in highway deaths, these numbers are still far greater than the reductions seen in prior years.

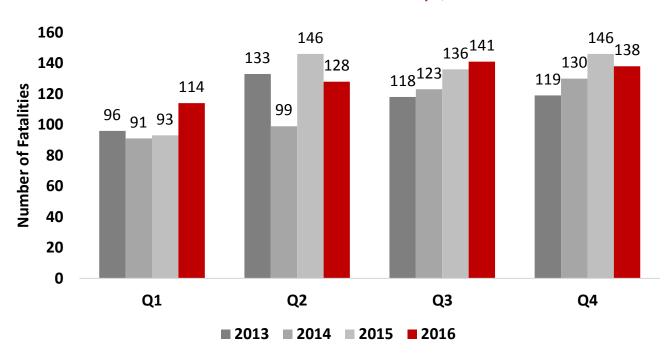
These increased numbers of highway deaths over the past two years also has been experienced nationally as the total number of deaths on our nation's highways increased by 7.2% to 35,092 fatalities in 2015 and is projected to rise another 6% in 2016. A survey conducted of drivers by the National Safety Council indicates that many are comfortable with such risky driving behaviors as speeding, texting behind the wheel and driving after consuming either drugs or alcohol. Additionally, the National Highway Traffic Safety Administration (NHTSA) attributes some of the cause of these fatality increases nationally to relatively inexpensive gasoline, a sharp increase in miles traveled and an improved economy.

Preliminary analysis of 2016 data in Maryland indicates Vehicle Miles Traveled (VMT) increased by nearly 2% - an increase of more than one billion miles driven. This increased exposure, coupled with risky driving behaviors and a failure to use seat belts, are believed to be a significant reason for the increase in highway fatalities in Maryland.

## **PERFORMANCE MEASURE 3.2**

Number of Traffic-Related Fatalities on All Roads

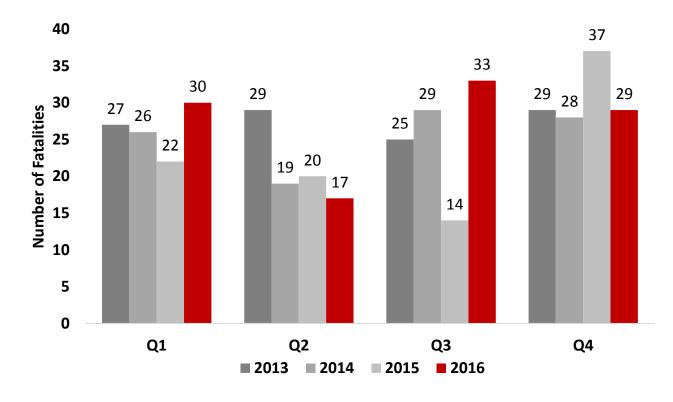
Chart 3.2.1: Traffic Related Fatalities on All Roads by Quarter 2013-2016



## **PERFORMANCE MEASURE 3.2**

Number of Traffic-Related Fatalities on All Roads

Chart 3.2.2: Traffic Related Pedestrian Fatalities on All Roads by Quarter 2013-2016



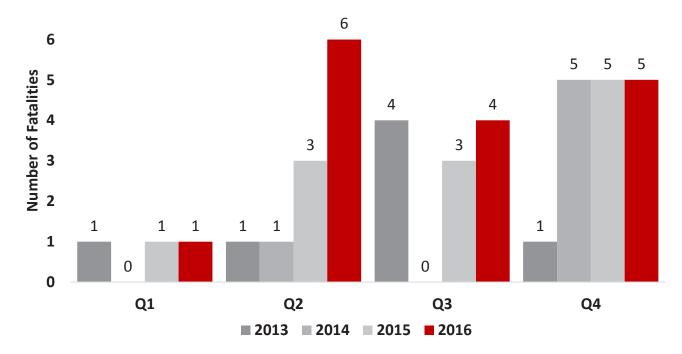
## PERFORMANCE MEASURE 3.2

## Number of Traffic-Related Fatalities on All Roads

Bicyclists typically account for approximately 1% of all fatalities on Maryland highways annually, or on average, about five or six bicycle fatalities every year. This average also has begun to escalate at an alarming rate in the past two years. There were 11 bicycle fatalities in 2015, and preliminary analysis indicates that in 2016, 16 bicyclists lost their lives, composing more than 3% of all traffic-related fatalities on Maryland highways.

Pedestrian deaths typically account for approximately 20% of all traffic-related fatalities. Pedestrian fatalities consistently measure approximately 100 per year. After a decrease in fatal pedestrian crashes in 2015, this trend reversed in 2016, with preliminary analysis indicating that 110 pedestrians lost their lives in traffic-related crashes.

Chart 3.2.3: Traffic Related Bicycle Fatalities on All Roads by Quarter 2013-2016



#### TANGIBLE RESULT DRIVER:

Sarah Clifford Maryland Transportation Authority

### PERFORMANCE MEASURE DRIVER:

Thomas Gianni Motor Vehicle Administration (MVA)

### **PURPOSE OF MEASURE:**

To track trends in the number of persons killed in motor vehicle crashes per vehicle miles traveled (VMT).

### FREQUENCY:

Annually (in January)

## DATA COLLECTION METHODOLOGY

Traveled (VMT) data based on highway counts on roadways across the state. Fatality data is collected by the MSP through its ACRS. The Maryland Highway Safety Office (MHSO) collects the data from these two agencies.

### NATIONAL BENCHMARK:

National Highway Fatality Rate of 1.12 in 2015.

## PERFORMANCE MEASURE 3.3

# Maryland Traffic-Related Fatality Rate (Highways)

The fatality rate is a measure of the number of persons killed in a trafficrelated crash for every 100 million vehicle miles traveled (VMT) on all roads in the State. Through the use of automated highway counters, the VMT is determined monthly by SHA and is compared annually to the number of traffic-related fatalities to determine the rate.

Maryland's traffic-fatality rate compares favorably to the national fatality rate. While the U.S. fatality rate never has dipped below one death per 100 million VMT, Maryland's rate has remained below one for the past seven years. Although this rate had been trending downward, it increased in 2015 to .91 fatalities per 100 million VMT.

This increase corresponds with the significant increase in traffic-related fatalities in Maryland in 2015. Preliminary analysis of 2016 data in Maryland indicates VMT increased by nearly 2% - an increase of more than one billion miles driven. Despite these increases, Maryland's 2015 rate remained below the national rate of 1.12.

Historically, as the nation's and/or state's economy grows, people tend to drive more, increasing both the state's VMT and a person's risk for being in a crash. Opportunities to lower the fatality rate are best achieved by decreasing the number of traffic-related fatalities, as VMT is more difficult to influence.

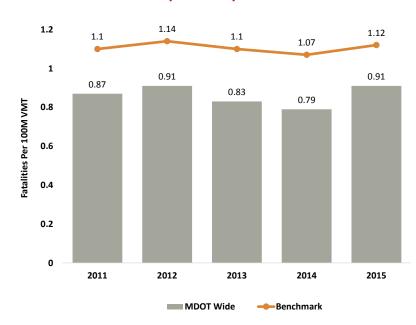


# Provide a Safe and Secure Transportation Infrastructure

### PERFORMANCE MEASURE 3.3

Maryland Traffic-Related Fatality Rate (Highways)

Chart 3.3.1: Traffic Related Fataility Rate Maryland v National Benchmark 2011-2015



### TANGIBLE RESULT DRIVER:

Sarah Clifford Maryland Transportation Authority (MDTA)

### PERFORMANCE MEASURE DRIVER:

Thomas Gianni Motor Vehicle Administration (MVA)

## PURPOSE OF MEASURE:

To track quarterly and annual trends in the number of persons seriously injured in motor vehicle crashes.

## FREQUENCY:

Quarterly

### DATA COLLECTION METHODOLOGY:

Based on Collected Police Data submitted to MSP through ACRS.

## NATIONAL BENCHMARK: N/A

### PERFORMANCE MEASURE 3.4

# Number of Traffic-Related Serious Injuries on all Roads

The number of traffic-related serious injuries is a count of persons sustaining an incapacitating injury in a crash. It is determined by a responding police officer investigating the crash and gathered from the injury severity code entered in the crash report. Maryland's Strategic Highway Safety Plan (SHSP) is based on the "Toward Zero Deaths" approach: to reduce fatalities and serious injuries from traffic-related crashes by 50 percent by 2030 from the 2008 baseline. Serious Injury Goals have been set with a similar methodology. Interim Goals include 2015: 3,945; and 2020: 2,939. Strategies for reducing the crashes that cause both fatal and serious injuries are contained within the six main emphasis areas of the SHSP

Over the past 10 years there has been a significant decrease in trafficrelated serious injuries, including a 42 percent decline during a seven year period from 2008 to 2015. In 2016 however the preliminary data indicates a 15% increase of nearly 400 more reported traffic-related serious injuries.

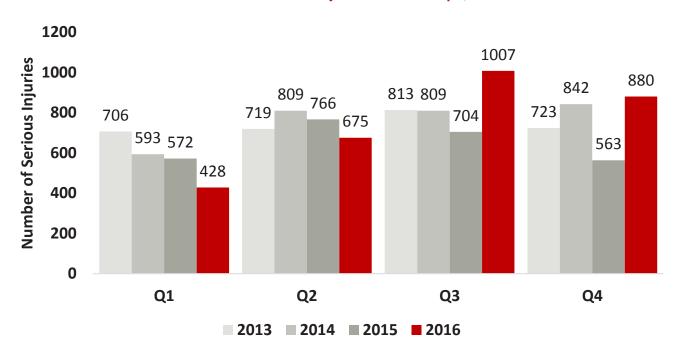
Since fatality data is only a small portion of the entire crash picture in Maryland, serious injuries, and their frequency, help to provide more robust data in determining crash trends across the State. Additionally, striving to minimize crashes that result in serious injuries serves to reduce a motorist's risk for suffering their accompanying life-altering consequences.

Since serious injuries are defined differently from state-to-state there is no national or common benchmark.

## **PERFORMANCE MEASURE 3.4**

Number of Traffic-Related Serious Injuries on all Roads

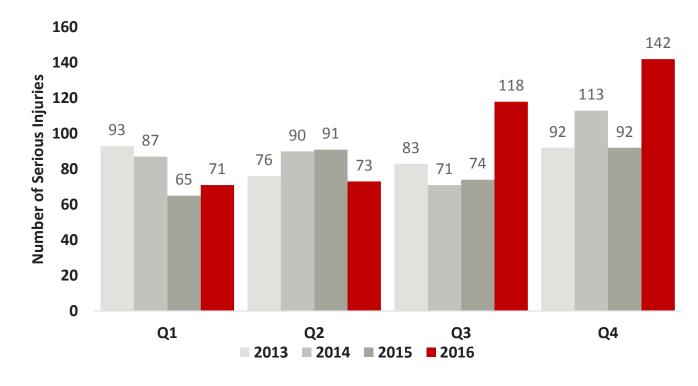
Chart 3.4.1: Traffic Related Serious Injuries on All Roads by Quarter 2013-2016



## **PERFORMANCE MEASURE 3.4**

Number of Traffic-Related Serious Injuries on all Roads

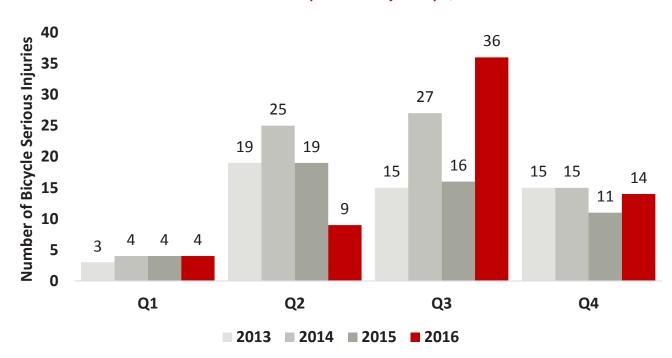
Chart 3.4.2: Traffic Related Pedestrian Serious Injuries by Quarter 2013-2016



## PERFORMANCE MEASURE 3.4

Number of Traffic-Related Serious Injuries on all Roads

Chart 3.4.3: Traffic Related Bicycle Serious Injuries by Quarter 2013-2016



### TANGIBLE RESULT DRIVER:

Sarah Clifford **Maryland Transportation Authority** 

### PERFORMANCE MEASURE DRIVER:

Thomas Gianni Motor Vehicle Administration (MVA)

### **PURPOSE OF MEASURE:**

To track trends in the number of persons seriously injured in motor vehicle crashes per VMT.

### FREQUENCY:

Annually (in January)

#### DATA COLLECTION METHODOLOGY:

SHA collects VMT data based on highway counts on roadways across the state. The serious injury data is collected by the MSP through its ACRS. The MHSO collects the data from these two agencies. The rate is based on persons seriously injured in crashes per 100 million VMT.

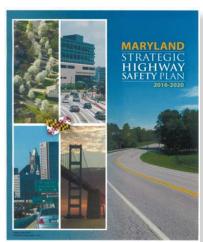
# NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 3.5

# Maryland Traffic-Related Serious Injury Rate (Highways)

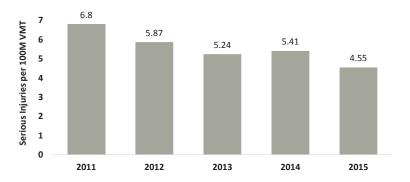
Maryland's serious injury rate is based on a measure similar to the fatality rate (number of persons seriously injured in a traffic-related crash per 100 million VMT). Over the past eight years, both the number of serious injuries and the corresponding rate have dropped dramatically by more than 33%. Maryland's Strategic Highway Safety Plan (SHSP) is based on the Toward Zero Deaths approach, and serious injury rate targets have been set using a similar methodology.



The SHSP contains strategies intended to reduce risky driving behaviors that result in the types of crashes leading to death or serious injury. By addressing and ultimately eliminating these severe crashes, all motorists can enjoy traveling our roadways without the fear of being killed or seriously injured. Death or serious injury is not an acceptable consequence of driving.

As engineering advances have resulted in safer vehicles and highways, and as emergency medical services continue to provide immediate critical care, the numbers of traffic-related serious injuries (and their corresponding rates) have declined significantly in the last several years. Even in 2015, when traffic-related fatalities increased significantly, the number of trafficrelated serious injuries and its corresponding rate continued to decline.

### Chart 3.5.1: Maryland Traffic Related Serious Injury Rate 2011-2015



# Provide a Safe and Secure Transportation Infrastructure

### TANGIBLE RESULT DRIVER:

Sarah Clifford Maryland Transportation Authority

### PERFORMANCE MEASURE DRIVER:

Gina Watson Maryland Port Administration (MPA)

### PURPOSE OF MEASURE:

To track trends in seat belt use in Maryland and assess how Maryland ranks against the national rate as an indicator of how well seatbelt use is encouraged.

### FREQUENCY:

Annually (in January)

### DATA COLLECTION METHODOLOGY:

**Observational Survey conducted** by MVA MHSO.

### NATIONAL BENCHMARK:

Nationwide usage rate provided by NHTSA reached 90.1 percent in 2016.

# PERFORMANCE MEASURE 3.6 Maryland Seat Belt Usage Rate

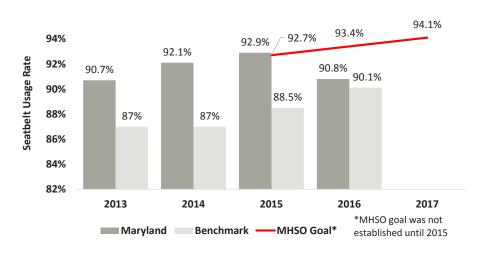
The use of seat belts by Maryland drivers greatly reduces the severity of personal injury and occupant fatalities in crashes. States such as Maryland with primary and secondary seat belt enforcement laws exhibit higher seat belt usage rates.

Maryland's seat belt usage rate is collected by an observational survey methodology approved by the National Highway Traffic Safety Administration (NHTSA). Maryland's

2016 seat belt survey usage rate was 90.8 percent versus 92.9 percent in 2015. However, NHTSA shows a national increase in belt use at 90.1 percent in 2016 versus 88.5 percent in 2015.

The Maryland Highway Safety Office (MHSO) goal for seat belt usage for 2017 is 94.1 percent. Maryland will continue to be a strong supporter of the Click-it or Ticket campaign with incorporation of dynamic public awareness programs. In addition, law enforcement agencies will continue to be educated on the importance of seat belt enforcement.

### Chart 3.6.1: Seat belt Usage Maryland vs Benchmark 2013-2016



#### TANGIBLE RESULT DRIVER:

Sarah Clifford Maryland Transportation Authority

### PERFORMANCE MEASURE DRIVER:

Cedric Ward State Highway Administration (SHA)

### PURPOSE OF MEASURE:

To track and assess the performance of MDOT's incident management programs to respond to customer needs while traveling.

### FREQUENCY:

Quarterly

### DATA COLLECTION METHODOLOGY:

Data is collected from centralized reporting to CHART for roadway data. MPA and MAA data are collected individually.

# NATIONAL BENCHMARK:

N/A

# PERFORMANCE MEASURE 3.7

# Disabled Motorists Assisted by MDOT

The Coordinated Highways Action Response Team (CHART) is a joint effort of MDOT, Maryland State Police (MSP), and numerous other Federal, state and local agencies. CHART provides assistance to disabled motorists and responds to traffic incidents throughout Maryland. In the Baltimore and Washington metropolitan areas, patrols are operated 24 hours per day, seven days per week. In addition to services on highways, the MPA and MAA provide assistance to their customers who experience vehicle issues. These services provide an added value to MDOT customers who might otherwise need to rely on paid service providers. Customers can access this service by dialing \*77 or through the normal 911 emergency dispatch. Additionally, CHART provides real-time traffic conditions through its website: http://www.chart.state.md.us/.

For the 2016 calendar year, MDOT has helped 80,111 disabled motorists. There was an increase in assists and responses between the second and third quarters MDOT-wide.

Efforts are underway to advertise and award the next phase of Closed Circuit Television Cameras (CCTV) and Dynamic Message Boards (DMS) to further assist with traffic monitoring, incident detection, and providing motorists with information to avoid delays and congestion.

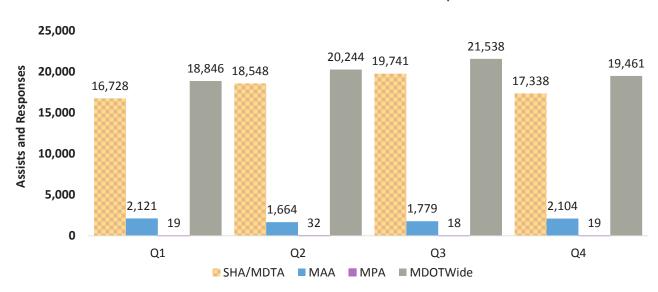


# Provide a Safe and Secure Transportation Infrastructure

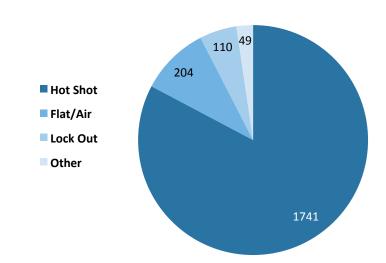
### PERFORMANCE MEASURE 3.7

Disabled Motorists Assisted by MDOT

### Chart 3.7.1: CY 2016 Number of Assists and Responses



## 3.7.2: MAA Customer Assists by Type Q4 2016



## TANGIBLE RESULT DRIVER:

Sarah Clifford **Maryland Transportation Authority** 

### PERFORMANCE MEASURE DRIVER:

Cedric Johnson Maryland Aviation Administration (MAA)

### PURPOSE OF MEASURE:

To track injury reporting trends at MDOT TBUs.

# FREQUENCY:

Quarterly

### DATA COLLECTION METHODOLOGY:

Collected by Injured Workers Insurance Fund (Chesapeake Employers' Insurance is for private companies) and sent to agencies as a report.

# NATIONAL BENCHMARK:

N/A

### PERFORMANCE MEASURE 3.8

# Number of Employee Injuries Reported (First Report of Injury)

This measure is used for analysis and the development and implementation of risk mitigation strategies. This is the starting point data source for maintaining a safe work environment.

This measure includes all first reports of injury (FROI) to the Injured Workers Insurance Fund (Chesapeake Employers' Insurance is for private companies). This is a 2nd quarter comparison of FY2016 versus FY2017. Data indicates a slight decrease during FY2017 in the number of employee injuries reported.

Strategies for reducing employee injuries include the timely submission of injury reports. The TBU Risk Managers meet quarterly to review data and discuss useful strategies.

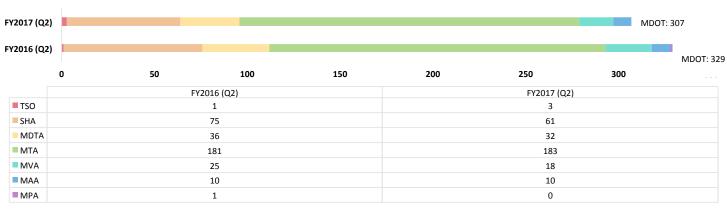


# Provide a Safe and Secure Transportation Infrastructure

### PERFORMANCE MEASURE 3.8

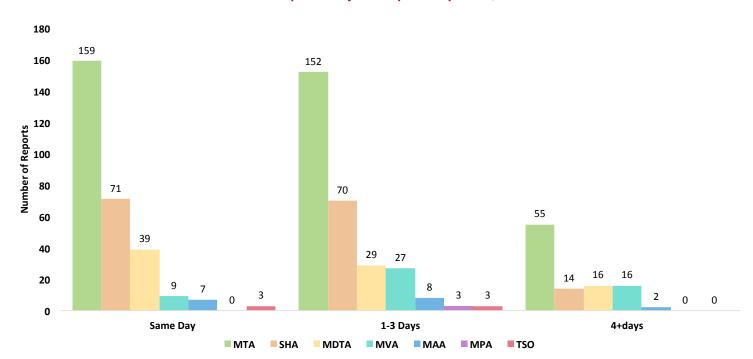
Number of Employee Injuries Reported (First Report of Injury)

Chart 3.8.1: Number of First Report of Injuries by TBU Q2 FY2016 vs. Q2 FY2017



Number of Injuries

Chart 3.8.2: Speed of Injuries Reported by TBU Q2 FY2017



### TANGIBLE RESULT DRIVER:

Sarah Clifford Maryland Transportation Authority

### PERFORMANCE MEASURE DRIVER:

Cedric Johnson Maryland Aviation Administration (MAA)

### PURPOSE OF MEASURE:

To track, trend, and mitigate lost work days.

# FREQUENCY:

Quarterly

## DATA COLLECTION METHODOLOGY:

Data is collected through multiple MDOT timekeeping systems.

## NATIONAL BENCHMARK:

N/A

### PERFORMANCE MEASURE 3.9

# Number of Employee Lost Work Days Due to Injuries

Employee safety is a top priority to MDOT. However, injuries do occur on the job and work days are sometimes lost as a result. Lost work days reduce the effectiveness of TBUs and are an indirect measure of employee health and welfare.

This measure only includes lost work days due to on the job, work-related injuries (Note that lost work days are associated with the number of injuries reported in Performance Measure 3.8). Factors affecting this measure include varying work conditions and environments, and differing risk profiles amongst employees across TBUs, as well as inconsistent leave coding policies and practices across MDOT's payroll systems.

This is a 2nd quarter comparison of FY2016 versus FY2017. Data indicates a FY2017 increase in the number of lost work days due to injuries. It is important to note that there are varying work environments, inconsistent employee injury leave policies and two (2) separate payroll systems.

Safety practices such as personal protective equipment, safety training, and safety policies are employed to reduce employee injuries and lost work days.

## **PERFORMANCE MEASURE 3.9**

Number of Employee Lost Work Days Due to Injuries

Chart 3.9.1: Number of Employees Coding LY (Work Injury Leave) by TBU Q2 FY2017

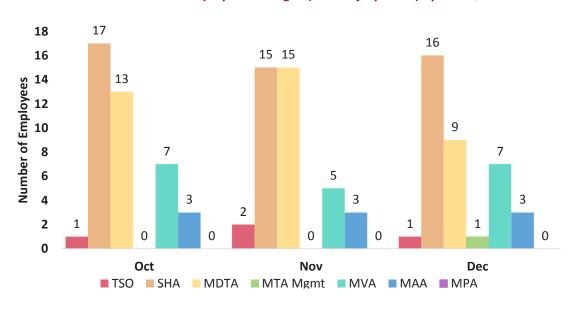
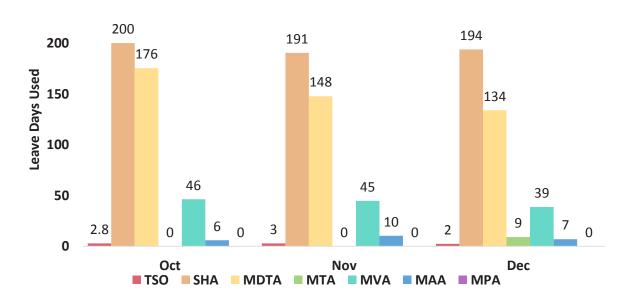


Chart 3.9.2: Number of Work Injury Leave (LY) Days Used by TBU Q2 FY2017



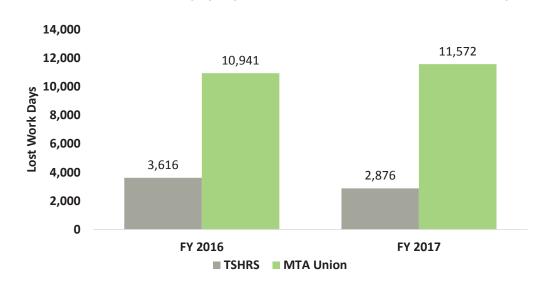
### **PERFORMANCE MEASURE 3.9**

Number of Employee Lost Work Days Due to Injuries

Chart 3.9.3: MTA Union Lost Work Days Due to Injuries FY 2013 - 2017 July-Dec



Chart 3.9.4: Number of Work Injury Days Used TSHRS and MTA Union FY2016-2017 July - Dec



### TANGIBLE RESULT DRIVER:

Sarah Clifford **Maryland Transportation Authority** 

### PERFORMANCE MEASURE DRIVER:

Phil Thomas

Maryland Transit Administration (MTA)

#### PURPOSE OF MEASURE:

To track customer incidents within MDOT facilities where customers are rendered a service to ensure our customers that MDOT facilities are safe for our customers.

## FREQUENCY:

Quarterly

### DATA COLLECTION METHODOLOGY:

TBUs track using their existing processes and report to the driver via phone or email.

NATIONAL BENCHMARK: N/A

### PERFORMANCE MEASURE 3.10

# Number of Customer Incidents at **MDOT** Facilities

MDOT has programs in place to ensure the safety and security of its facilities and its customers because TBUs provide many services to the public. MDOT is committed to providing a safe and secure environment to our customers, which is why measuring unplanned events that may or may not result in injury within enclosed buildings that provide a service (i.e MVA centers, Stop in Centers) is important.

This is still a new measure and MDOT is working with each TBU to ensure that customer incidents are being tracked. This measure has also allowed for some TBUs to implement new programs and processes to ensure customer incident tracking is occurring. An example is identifying and tracking the number of incidents at MDOT facilities where business is conducted. Identifying and tracking incidents and associated trending offers data for implementing corrective actions; thereby reducing hazards and minimizing risk for MDOT and customers.

It is important for MDOT to provide customers safe areas and facilities to complete their day-to-day transportation needs.



### PERFORMANCE MEASURE 3.10

Number of Customer Incidents at MDOT Facilities

Chart 3.10.1: Number of Customer Incidents in MDOT Buildings 2016

